

IN THE CLAIMS

At the outset, Applicant notes that Claim 11 was inadvertently omitted from the original application as filed on July 11, 2001, and as such no replacement claim has been filed in the present amendment.

Please amend the claims in accordance with the following rewritten claims in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

Sub D1
cont'd
A4
5. (AMENDED) The article of claim 1, wherein said longitudinal fibers have a cross sectional shape selected from the group consisting of flat, rectangular, elliptical, round, and oval.

Sub D1
cont'd
A2
7. (AMENDED) The article of claim 1, wherein said lateral fibers have a cross sectional shape selected from the group consisting of flat, rectangular, elliptical, round, and oval.

A3
16. (AMENDED) The method of claim 15, wherein the structural element is cleaned and roughened prior to placing said fiber mesh tape on the structural element.

17. (AMENDED) The method of claim 15, wherein said bonding agent is an epoxy resin.

A3
Cont

18. (AMENDED) The method of claim 15, wherein pressure is applied to said fiber mesh tape such that said bonding agent flows through said fiber mesh tape thereby eliminating air pockets and thick areas of said bonding agent.

AN

20. (AMENDED) The method of claim 15, further comprising the step of applying pressure to said fiber mesh tape thereby forcing said fiber mesh tape towards the structural element until said bonding agent retains said fiber mesh tape to the structural element.

Please cancel claims 6 and 8 without prejudice or disclaimer of the subject matter contained therein.

Please add the following new claims.

Sub P1
Cont

23. (NEW) The article of claim 2 wherein said pre-cured carbon fibers are formed having a round-cross section.

AN
Cont

24. (NEW) An article for use in reinforcing a structural element, the article comprising:

- a plurality of longitudinal fibers;
- a plurality of lateral fibers interwovenly connected to the longitudinal fibers; and
- a coating material applied to the woven longitudinal fibers and the lateral fibers.

*Sub P1
cont 12*

25. (NEW) The article of claim 24, wherein said fibers are pre-cured carbon fibers.

26. (NEW) The article of claim 24, wherein said lateral fibers are of a different material than said longitudinal fibers.

27. (NEW) The article of claim 24, wherein said longitudinal fibers are in tension.

*AS
CAB*

28. (NEW) The article of claim 24, wherein said longitudinal fibers have a cross sectional shape selected from the group consisting of flat, rectangular, elliptical, round, and oval.

29. (NEW) The article of claim 24, wherein said lateral fibers have a cross sectional shape selected from the group consisting of flat, rectangular, elliptical, round, and oval.

30. (NEW) The article of claim 25 wherein said pre-cured carbon fibers are formed having a round cross-section.

31. (NEW) The article of claim 23, wherein said lateral fibers are generally at an angle of between 45 and 90 degrees to said longitudinal fibers.

Sub P1
cont 1

32. (NEW) The article of claim 23, wherein said lateral fibers sandwich said longitudinal fibers.

33. (NEW) The article of claim 23, wherein said lateral fibers are woven to said longitudinal fibers such that said lateral fibers lie alternately below and above said longitudinal fibers.

34. (NEW) The article of claim 23, wherein said lateral fibers are at least on one side of said longitudinal fibers.

AS
Cont

35. (NEW) The article of claim 23, wherein said fibers are spaced a sufficient distance apart to allow an adhesive to flow between said fibers.

36. (NEW) A method for reinforcing a structural element comprising the steps of:

providing a fiber mesh tape having a removable sheet material adhered to one side;

removing said sheet material from said fiber mesh tape;

applying a bonding agent to one of a surface of said structural element and said fiber mesh tape; and

placing said fiber mesh tape on said structural element.

37. (NEW) The method of claim 36, wherein said bonding agent is an epoxy resin.

38. (NEW) The method of claim 36, wherein pressure is applied to said fiber mesh tape such that said bonding agent flows through said fiber mesh tape thereby eliminating air pockets and thick areas of said bonding agent.

39. (NEW) The method of claim 38, wherein said fiber mesh tape is embedded within said bonding agent.

AS
Cont
40. (NEW) The method of claim 36, further comprising the step of applying pressure to said fiber mesh tape thereby forcing said fiber mesh tape towards the structural element until said bonding agent retains said fiber mesh tape to the structural element.

41. (NEW) The method of claim 40, wherein an air impermeable strip is placed over said fiber mesh tape and is sealed to the structural element prior to application of pressure.

42. (NEW) The method of claim 41, wherein a vacuum pump is used to apply a vacuum pressure to said air impermeable strip.

CONCLUSION

Applicant respectfully requests that the Examiner preliminarily amend the present application as noted herein. Prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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